

What is claimed is :

1. A method of managing manufacturing processes including at least a batch-process for a batch which comprises plural product lots by at least a batch-manufacturing apparatus, said method comprising the steps of :

transferring a loading request from the batch-manufacturing apparatus to a host computer ;

retrieving batch-processable product lots by the host computer to form a batch of plural batch-processable product lots ;

carrying the batch to the batch-manufacturing apparatus ;

verifying by the batch-manufacturing apparatus whether or not a lot number of the batch reaches a predetermined maximum batch-lot number ;

sending an additional loading request from the batch-manufacturing apparatus to the host computer ;

retrieving by the host computer whether or not any further additional batch-processable product lot is present ; and

carrying the additional batch-processable product lot to the batch-manufacturing apparatus to add the additional batch-processable product lot to the batch.

2. The method as claimed in claim 1, wherein the additional loading request is repeatedly sent to the host computer until the lot number

of the batch reaches the predetermined maximum batch-lot number.

3. The method as claimed in claim 1, wherein a delete request for deleting the additional loading request is sent from the batch-manufacturing apparatus to the host computer either when the lot number of the batch reaches the predetermined maximum batch-lot number or when a transmission of the additional loading request is not in time for initiating the batch-process by the batch-manufacturing apparatus.

10 4. The method as claimed in claim 1, wherein the product comprises a semiconductor wafer, and one of the product lots comprises a plurality of the semiconductor wafer, and one of the batches comprises a plurality of the semiconductor wafer lot.

15 5. The method as claimed in claim 4, wherein said batch-manufacturing apparatus is capable of batch-processing the plural semiconductor wafers in the single batch.

6. A system for managing a manufacturing processes including at 20 least a batch-process for a batch which comprises plural product lots, and said system comprising :

a host computer ;  
at least a batch-manufacturing apparatus for carrying out a batch-process under control of the host computer ;

at least a stoker for storing the plural product lots ;

at least a carrier for carrying the plural product lots between the batch-manufacturing apparatus and the stoker under control of the host computer ;

5           wherein a loading request is transferred from the batch-manufacturing apparatus to a host computer, and the host computer retrieves batch-processable product lots to form a batch of plural batch-processable product lots, and the batch-manufacturing apparatus verifies whether or not a lot number of the batch reaches a predetermined  
10 maximum batch-lot number, and an additional loading request is sent from the batch-manufacturing apparatus to the host computer, and the host computer is further retrieved whether or not any further additional batch-processable product lot is present, and the additional batch-processable product lot is carried to the batch-manufacturing  
15 apparatus to add the additional batch-processable product lot to the batch.

7.           The system as claimed in claim 6, wherein the additional loading request is repeatedly sent to the host computer until the lot number of the batch reaches the predetermined maximum batch-lot number.

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8.           The system as claimed in claim 6, wherein a delete request for deleting the additional loading request is sent from the batch-manufacturing apparatus to the host computer either when the lot number of the batch reaches the predetermined maximum batch-lot number or when a

transmission of the additional loading request is not in time for initiating the batch-process by the batch-manufacturing apparatus.

9. The system as claimed in claim 6, wherein the system has plural blocks, each of which has at least one of the stoker and the batch-manufacturing apparatus, and at least one of the carrier is allocated to each of the plural blocks, and the host computer retrieves the wafer lots in each of the plural blocks and also controls each of the carriers in each of the plural blocks.

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10. The system as claimed in claim 6, wherein the product comprises a semiconductor wafer, and one of the product lots comprises a plurality of the semiconductor wafer, and one of the batches comprises a plurality of the semiconductor wafer lot.

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11. The system as claimed in claim 10, wherein said batch-manufacturing apparatus is capable of batch-processing the plural semiconductor wafers in the single batch.